

water. To reduce the risk of esophageal damage, it should be taken with at least 6 to 8 ounces of water and the patient must remain upright for at least 30 minutes and until the first meal of the day has been eaten.

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Obesity as a Chronic Disease

OBESITY IS USUALLY CONSIDERED a lifestyle disease. Those who are morbidly overweight are often regarded as weak in character or lacking discipline. Judgmental attitudes against the obese are pervasive in society and are just as harmful as other forms of social prejudice.

Obesity should be recognized as an important chronic disease, much like hypertension, hyperlipidemia, and type 2 diabetes. Like those diseases, obesity is a complex interplay of genetic, metabolic, and psychosocial factors.

The importance of obesity has been recently clarified. While more than 400,000 premature deaths per year in the US are attributed to smoking, overeating and lack of physical activity come in at a close second, accounting for 300,000 premature deaths per year. In the past, obesity without other co-morbidities has been considered a relatively benign condition. The physiology of being overweight, however, directly contributes to elevated blood pressure, hyperglycemia, and a high-risk lipid profile.

Like other complex chronic diseases, the management of obesity requires a multidisciplinary program, combining lifestyle modifications with the possibility of pharmacotherapy. A team approach, extensive patient education, and regular long-term follow-up are hallmarks of therapy.

The goal in treating obesity is to achieve a healthier weight, not the elusive ideal weight. A 10% reduction in weight may result in dramatic improvement in co-morbidities such as elevated blood pressure, hyperglycemia, and lipid disorder. The best objective measure of obesity is the body mass index (BMI), which is calculated using height

and weight (tables for calculating BMI are now readily available). A BMI of 27 or greater indicates obesity.

Greatly reducing the fat content of the diet is often successful in treating obesity. Vegetarian diets alone may not be successful if they contain an abundance of oils. All dietary fat is high in calories (9 calories per gram), and weight loss usually occurs if calories from fat make up less than 20% of total calories. The nutritional approach to obesity is directed toward reducing both fat content and total calories in the diet.

Increasing physical activity is the second cornerstone of management. Heavy exercise may be dangerous for obese patients, but the addition of regular physical activity, such as walking, to the daily routine fosters weight loss. Both the dietary and physical activity components of the treatment must be incorporated into the patient's lifestyle for long-term success. Behavior modification is focused on the long term rather than temporary changes.

Pharmacotherapy for the obese has entered mainstream therapy. Centrally acting drugs focusing on the neurotransmitters norepinephrine and serotonin and avoiding the dopinergic effects of amphetamines have been found to be relatively safe and effective. A combination of phentermine, a norepinephrine-releasing agent, and fenfluramine, a serotonin-releasing agent and reuptake inhibitor, has become popular. Concerns about an increase in primary pulmonary hypertension and, more recently, cardiac valvular defects have raised important questions regarding the long-term safety of these drugs. New agents, such as sibutramine, which is not a releasing agent but rather a norepinephrine- and serotonin- reuptake inhibitor, may be safer. Other therapeutic agents, such as Orlistat, which acts directly on the intestine to reduce the absorption of fat, provide an alternative approach to therapy.

If we accept the serious morbidity of obesity, long-term therapy including drugs, if necessary, should be considered standard medical therapy. Currently, many health plans do not cover anti-obesity treatment. This is partly due to the popularity of such treatment for cosmetic concerns. It is important that all of medicine recognize the seriousness of obesity and accept the importance of therapy. Using the BMI as a diagnostic standard should clarify those persons who require therapy. Just like hypertension, hyperlipidemia, and type 2 diabetes, obesity is a chronic disease and must be aggressively managed.

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